



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,287	06/24/2003	Romelia H. Flores	BOC9-2003-0013 (383)	1163
40987	7590	04/23/2007	EXAMINER	
AKERMAN SENTERFITT P. O. BOX 3188 WEST PALM BEACH, FL 33402-3188			ADDY, THJUAN KNOWLIN	
		ART UNIT		PAPER NUMBER
				2614

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/602,287	FLORES ET AL.	
	Examiner	Art Unit	
	Thjuan K. Addy	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 24 June 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-30 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 June 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 02/27/04.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eilbacher et al (US 6,724,887), in view of Bala (US 6,798,876).
2. In regards to claims 1, 17, and 19, Eilbacher discloses a method, system, and machine-readable storage for managing customer relationship management (CRM) resources (See col. 5 lines 26-30) comprising the steps of: communicatively linking a service router (See Fig. 3 and PBX/ACD 102) to a plurality of service resources (See Fig. 3 and agent work stations 104) (See col. 8 lines 31-35); for each of said service resources, establishing at least one routing criterion (for example, the routing criterion may be the agent's availability and/or the agent's specific skill/training) (See col. 8 lines 37-42); receiving a plurality of service requests via a plurality of communication channels (for example, customers may send in request for service via telephone calls, faxes, e-mail, etc.) (See col. 5-6 lines 66-4); analyzing said service requests for request characteristics; comparing said request characteristics to routing criteria; and automatically routing each of said service requests to a selected service resource based at least in part upon said comparing step (See col. 8 lines 37-42). Although Eilbacher

discloses determining whether the customer experience in connection with the communication was satisfactory or unsatisfactory (or poor, fair, or good) (See col. 9 lines 50-56), Eilbacher does not specifically disclose dynamically altering values for said routing criteria based upon feedback. Bala, however, does disclose dynamically altering values (for example, the values may simply be the determination of whether or not the appropriate representative was selected to handle the particular call) for said routing criteria based upon feedback (See col. 4-5 lines 48-12). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate this feature within the method, as a way of allowing the system to perform a post-call routine to determine how successfully it matched the customer with the appropriate call center representative, thus providing for efficient routing of calls from customers with a specific need to a call center representative that has the means to satisfy that need.

3. In regards to claims 2 and 20, Eilbacher discloses the method and machine-readable storage, wherein said communication channel of receiving step is selected from the group consisting of a telephony channel, e-mail channel, and fax channel (See col. 5-6 lines 66-4). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate the use of other communication channels within the method, as a way of providing communication between customers and agents.

Art Unit: 2614

4. In regards to claims 3 and 21, Eilbacher discloses the method and machine-readable storage, wherein said routing criteria of said establishing step is selected from the group consisting of resource availability and resource skill (See col. 8 lines 37-42).

5. In regards to claims 4 and 22, Eilbacher discloses the method and machine-readable storage, further comprising the step of: for each of said service resources, identifying at least one communication channel over which said service resource can respond to said service requests, wherein values for said at least one routing criterion depend upon said identified communication channel (See col. 11-12 lines 62-13 and col. 12 lines 21-26).

6. In regards to claims 5 and 23, Eilbacher discloses all of claims 5 and 23 limitations, except the method and machine-readable storage, further comprising the step of: receiving said feedback from a plurality of sources at least a portion of which reflect past performance in handling past service requests. Bala, however, does disclose receiving said feedback from a plurality of sources at least a portion of which reflect past performance in handling past service requests (e.g., previous/past calls) (See col. 3 lines 24-29 and col. 4 lines 48-54).

7. In regards to claims 6 and 24, Eilbacher discloses the method and machine-readable storage, further comprising the steps of: automatically extracting said feedback from a feedback instrumentality; and, assigning a feedback rating (e.g., poor, good, excellent) to said feedback (See col. 9-10 lines 50-3).

8. In regards to claims 7, 14, and 25, Eilbacher discloses all of claims 7, 14, and 25 limitations, except the method, system, and machine-readable storage, further

comprising the steps of: data mining customer sales information to rate the success of a particular service request response; and responsive to said data mining step, altering at least a portion of said routing criteria for said service resource associated with said service request response. Bala, however, does disclose data mining customer sales information to rate the success of a particular service request response; and responsive to said data mining step, altering at least a portion of said routing criteria for said service resource associated with said service request response (See col. 4-5 lines 48-12).

9. In regards to claims 8 and 26, Eilbacher discloses all of claims 8 and 26 limitations, except the method and machine-readable storage, further comprising the steps of: monitoring at least a portion of said service requests to obtain performance information; determining efficiency metrics from said monitoring; and, dynamically altering values for said routing criteria based upon said efficiency metrics. Bala, however, does disclose monitoring at least a portion of said service requests to obtain performance information (for example, information pertaining to how many calls regarding the selected product or service the customer service representative has successfully handled in the past and the number of instances the customer service representative has handled a call that resulted in a sale); determining efficiency metrics from said monitoring; and, dynamically altering values for said routing criteria based upon said efficiency metrics (See col. 4-5 lines 48-12).

10. In regards to claims 9, 15, and 27, Eilbacher discloses all claims 9, 15, and 27 limitations, except the method, system, and machine-readable storage, further comprising the step of: administratively modifying values for said routing criteria via a

Art Unit: 2614

routing management interface. Bala, however, does disclose administratively modifying values for said routing criteria via a routing management interface (See Fig. 1 and statistical modeling module 153) (See col. 3 lines 51-61 and col. 4-5 lines 66-7).

11. In regards to claims 10, 13, 18, and 28, Eilbacher discloses a method, system, and machine-readable storage for routing customer service requests within a customer relationship management (CRM) system (See col. 5 lines 26-30) comprising the steps of: receiving a service request from a customer via a communication channel (See col. 5-6 lines 66-4); and searching a routing data store for available service resources, wherein at least a portion of said service resources represent customer service representatives (See col. 8 lines 31-38). Eilbacher, however, does not disclose for each available service resource, computing a resource preference rating based at least in part upon previous service resource interactions via said communication channel; selecting a service resource for said customer service request based upon said resource preference rating; and establishing communications via said communication channel between said customer and said selected resource. Bala, however, does disclose for each available service resource, computing a resource preference rating (for example, the rating may be based on how many calls regarding the selected product or service the customer service representative has successfully handled in the past and the number of instances the customer service representative has handled a call that resulted in a sale) based at least in part upon previous service resource interactions via said communication channel; selecting a service resource for said customer service request based upon said resource preference rating; and establishing

communications via said communication channel between said customer and said selected resource (See col. 4 lines 40-65).

12. In regards to claims 11 and 29, Eilbacher discloses all of claims 11 and 29 limitations, except the method and machine-readable storage, wherein said computing step further comprises the steps of: for each service resource, receiving a plurality of criteria values for routing criteria; identifying routing weights for each of said routing criteria; for each of said routing criteria, multiplying said routing weight and said criteria value; and, summing results from said multiplying to compute said resource preference rating. Bala, however, does disclose for each service resource, receiving a plurality of criteria values for routing criteria; identifying routing weights for each of said routing criteria; for each of said routing criteria, multiplying said routing weight and said criteria value; and, summing results from said multiplying to compute said resource preference rating (See col. 4 lines 40-65).

13. In regards to claims 12 and 30, Eilbacher discloses all of claims 12 and 30 limitations, except the method and machine-readable storage, further comprising the steps of: receiving feedback about said service request; and, automatically altering at least one of said criteria values of an associated service resource in response to said feedback. Bala, however, does disclose receiving feedback about said service request; and, automatically altering at least one of said criteria values of an associated service resource in response to said feedback (See col. 4-5 lines 48-7).

14. In regards to claim 16, Eilbacher discloses the system, wherein said routing management interface further comprises: business analysis tools configured to permit at

least one of managers and administrators to analyze, query, summarize, and generate reports using data from said system (See col. 9-10 lines 50-3).

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Scarano et al (US 7,133,828) teach methods and apparatus for audio data analysis and data mining using speech recognition. Becerra et al (US 7,062,031) teach a call processing system. Wu et al (US 7,023,979) teach a telephony control system with intelligent call routing. Peterson et al (US 6,879,685) teach an apparatus and method for analyzing routing of calls in an automated response system.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thjuan K. Addy whose telephone number is (571) 272-7486. The examiner can normally be reached on Mon-Fri 8:30-5:00pm.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thjuan K. Addy
Patent Examiner
AU 2614